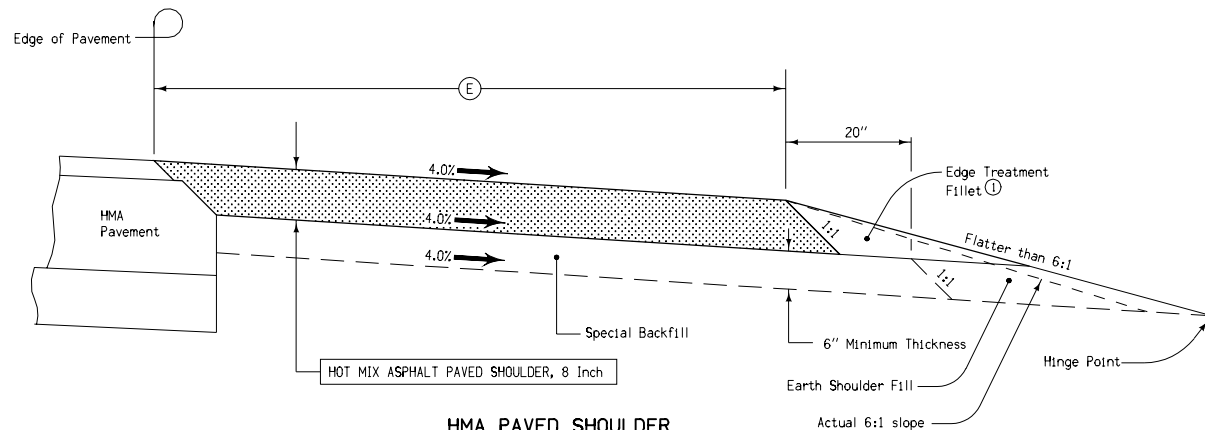


**HMA PAVED SHOULDER
ADJACENT TO NEW CONSTRUCTION**



**HMA PAVED SHOULDER
ADJACENT TO RECONSTRUCTION**

DESIGN QUANTITY TABLE^②

HOT MIX ASPHALT^③

SHOULDER SURFACE AREA Sq. Yds.				HOT MIX ASPHALT Tons				ASPHALT BINDER Tons				TACK COAT ^④ Gallons			
E = 4'	E = 6'	E = 8'	E = 10'	E = 4'	E = 6'	E = 8'	E = 10'	E = 4'	E = 6'	E = 8'	E = 10'	E = 4'	E = 6'	E = 8'	E = 10'
44.44	66.67	88.88	111.11	19.33	29.00	38.66	48.32	1.16	1.74	2.32	2.90	2.91	4.02	5.13	6.24

GENERAL NOTES:

Details indicated hereon illustrate the general requirements for construction of a Hot Mix Asphalt Paved Shoulder.

Any necessary special shaping required in preparation of subgrade shall be considered incidental to other work. Any material removed due to special shaping shall be disposed of at the direction of the Engineer.

The subgrade beneath Paved Shoulders shall be constructed in conformance with specifications for Natural Subgrade. "Special Backfill" material shall be paid for as specified in Section 2102. Payment shall be based on a uniform 6-inch thickness. The thickness may be extended at the Contractor's option with no compensation for additional material.

For rumble strip details, see Standard Road Plan RH-41D.

Rumble strip, special shaping, earth shoulder fill, and furnishing and finishing material for edge treatment fillet are incidental.

- ① Refer to the appropriate Detail Drawing.
- ② Quantities shown are for one shoulder per station. Rates of application may be adjusted at time of construction if so directed by the Engineer.
- ③ Quantities shown are based on a design weight of 145 lbs./cu. ft. for Hot Mix Asphalt with an asphalt content of 6.0% utilizing a 3/4" aggregate mix size, with 45% crushed particles, and no special aggregate frictional requirements. N_{inj} , N_{des} , and N_{max} shall be 7, 68, and 104 respectively regardless of design ESALs for the pavement. Asphalt Binder PG58-28 shall be utilized with this mix.
- ④ Includes quantity for tack coating vertical face of adjacent pavement prior to placement of any base material. Tack coat estimated at one (1) application at 0.05 gal./sq. yd.

Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN

RJ-33

REVISION: Show flatter than 6:1 slope and actual 6:1 slope.

REVISION NO.
15

APPROVED BY DESIGN METHODS ENGINEER

REVISION DATE
10-29-02

PAVED SHOULDER
8" HOT MIX ASPHALT
(ADJACENT TO HMA PAVEMENT)